14. **(Amended)** The image-forming process according to claim 8, wherein a center-line average roughness according to JIS B0601-1994 of the surface layer of the photosensitive member in the range of 0.01 to 0.9 μm, and

wherein the average inclination Δa is in the range of 0.001 to 0.06, as defined by the following equation:

A32 cont.

$$\Delta a = \frac{1}{\ell} \int_0^{\ell} \left| \frac{dy}{dx} \right| dx$$

where y is a height in a Y direction at a point x of a curve extending in a X direction.

REMARKS

Favorable reconsideration and withdrawal of the rejection set forth in the above-mentioned Official Action in view of the foregoing amendments and the following remarks are respectfully requested.

The specification and Abstract have been amended to improve their form. It is respectfully submitted that no new matter has been added.

Claims 1 through 14 remain pending in the application. Claims 15 through 23 have been canceled. Claims 1 through 14 have been amended to even more succinctly define the invention and/or to improve their form. It is respectfully submitted that no new matter has been added. Claims 1 and 8 are the only independent claims present in the application.

It is acknowledged with appreciation that Claims 1 through 14 would be allowable if rewritten or amended to overcome the below-discussed Section 112 rejection.

Claims 1 through 14 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the reasons set forth at pages 2 and 3 of the Official Action.

The Examiner asserts that it is unclear how the "kinetic frictional deviation factor" recited in Claims 2 and 3 relates to the "kinetic frictional deviation" recited in Claim 1. It appears that the source of indefiniteness resides in the dependency of Claim 3.

Claims 8 through 10 are also said to be unclear because these claims use the same language in reference to the photosensitive member and the recording sheet. In this instance, it appears that the source of the indefiniteness resides in the dependency of Claim 10.

In response, the dependency of Claim 3 has been amended from "Claim 1" to --Claim 2--, and the dependency of Claim 10 has been amended from "Claim 9" to --Claim 8--. It is believed that these amendments address and resolve the foregoing questions of indefiniteness.

In addition, the Examiner asserts that Claims 1 and 8 are indefinite because it is unclear what the "intended relative speed" of the photosensitive member and the recording sheet defines. (The claims have been amended to recite --prescribed relative speed--, which more aptly describes this aspect of the invention).

As discussed at least at page 22, lines 23 through 27 of the specification, a photosensitive drum 1 (Claim 1)/image-transfer member (Claim 8) contacts with the intermediate image-transfer member 20 (Claim 1)/belt/(Claim 8). The photosensitive drum/image-transfer member is driven to rotate clockwise at a prescribed peripheral speed.

The intermediate image-transfer member 20 is driven counterclockwise at the same peripheral speed. Accordingly, there is no difference in speed therebetween, i.e., a prescribed relative speed of zero.

Further, the rotations may be conducted at described rates. For example, as discussed at least at page 22, line 27 through page 23, line 7 and at page 75, lines 13 through 18 of the specification, in order to improve an image transfer efficiency and the like without adversely influencing the quality of image formation, a prescribed slight amount of relative speed difference in the peripheral speed velocity may be allowed.

It is clear that the inventions contemplated a "prescribed relative speed" which appears in amended Claims 1 and 8 to not only pertain to a situation wherein the relative speed is zero, but also to a situation wherein there is a slight difference in peripheral speed. See page 23, lines 5 through 7.

It is submitted that the expression "prescribed relative speed" as used in the amended claims is in compliance with the requirements of Section 112.

Finally, Claims 7 and 14 are said to be indefinite because it is unclear which JIS is intended in the claims.

In response, it is noted that the term "JIS" in Claims 7 and 14 refers to JIS B0601-1994 as set forth at least at page 37, lines 1 through 5 of the specification. Claims 7 and 14 have been amended to specifically recite the JIS.

In view of the foregoing, it is respectfully submitted that all of the grounds of the Section 112 rejection have been addressed, and that the claims are in full compliance with the requirements of the statute.

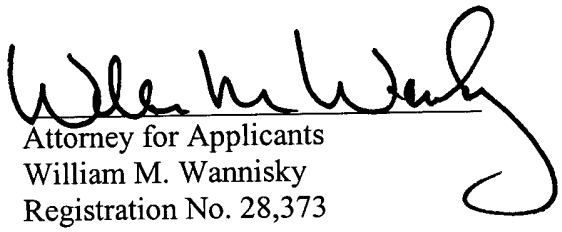
No art rejections have been lodged against the claims.

Claims 2 through 7 and 9 through 14 depend either directly or indirectly from one of Claims 1 and 8 and are allowable by virtue of their dependency and in their own right for further defining Applicants' invention.

In view of the foregoing, it is respectfully submitted that all claims present in the application are now in condition for allowance. Favorable reconsideration and early passage to issue of the present application are respectfully submitted.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,



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VERSION WITH MARKINGS SHOWING CHANGES MADE TO SPECIFICATION

The paragraph starting at page 2, line 14 and ending at page 2, line 25 has been amended as follows.

--Another type of image forming apparatuses are known which transfers [transfer] successively color-component images of color image information or of multicolor image information directly onto a recording sheet conveyed by an image-transferring belt to output a synthesized color image or multicolor image. The image forming apparatus employing such an image-transferring belt is [are] useful as a color image forming apparatus, or a multiple color image forming apparatus. The image forming apparatus employing the image-transferring belt is also useful as an image forming apparatus for high-speed formation.--

The paragraphs starting at page 3, line 4 and ending at page 4, line 9 have been amended as follows.

--As a photosensitive material, a-Si absorbs moisture on its surface under high humidity conditions, which tends to cause smudging of the toner image to result in blurring of the formed image. [Not only the] Smudging the [smudging] toner is not the only condition, which [affects] adversely affects the quality of the image. Other conditions affecting the quality of the image include adhering matters include various foreign matters deposited onto the photosensitive material surface such as fine dust of paper usually used

as the recording sheet, organic components released from the paper, and corona products generated by corona discharge at a high voltage in the apparatus. In particular, under high humidity conditions, the deposited matter lowers the resistivity of the photosensitive material, resulting in lower sharpness of the latent image and lower quality of the recorded image. To prevent the image blurring simply and effectively, usually the moisture absorption on the photosensitive material surface is prevented by employing a heater to apply electric current throughout whole days.

Such image forming apparatuses are required to save energy and to decrease industrial waste so as not to cause environmental pollution as in Blue Angel and Energy Star Program. Therefor, a method for preventing the image blurring on the a-Si photosensitive material is demanded which does not require a waiting power of the aforementioned whole-day electricity application system. Further, elongation of the lives of the members like the photosensitive member, the intermediate image-receiving member, and image transfer belt of the electrophotography apparatus is required to decrease [the] waste.--

The paragraph starting at page 6, line 5 and ending at page 6, line 13 has been amended as follows.

--Hitherto, such problems have been dealt with by changing the material of or the shape of the intermediate image-transfer member of the image-transferring belt, contact conditions, and stretching conditions thereof. However, [the] a-Si has not been

studied as the factor for preventing the fine vibration, toner melt adhesion, and foreign matter deposition, so that the problem has not been solved satisfactorily.--

The paragraphs starting at page 18, line 13 and ending at page 18, line 20 have been amended as follows.

--Fig. 1 shows schematically a constitution of an example of a color image forming apparatus having an intermediate image-transfer member for an electrophotographic process.

Fig. 2 shows schematically a constitution of an example of a color image forming apparatus having an image-transferring belt for an electrophotographic process.--

The paragraph starting at page 19, line 2 and ending at page 19, line 8 has been amended as follows.

--Fig. 6 is a schematic view of a friction testing [tester] apparatus for evaluating friction between the photosensitive member and the intermediate image-transfer member.

Fig. 7 is a schematic view of a friction testing [tester] apparatus for evaluating friction between the photosensitive member and the image-transferring belt.--

The paragraphs starting at page 20, line 8 and ending at page 22, line 2 have been amended as follows.

--This image forming apparatus has a photosensitive drum 1 of a rotating drum type which is the first image-holding member, and is constituted of an electrophotographic sensitive member which is used in repetition. On the surface of this photosensitive drum, an electrostatic latent image is formed, and then a toner is allowed to be deposited [deposit] onto the electrostatic latent image to form a toner image. Around photosensitive drum 1, there are disposed a primary electrifier 2 for electrically charging the surface of photosensitive drum 1 at a prescribed polarity and potential uniformly, and an imaging light projector not shown in the drawing for projecting imaging light 3 onto the electrified surface of photosensitive drum 1. There are also disposed developing devices: a first developing device 41 for depositing a magenta toner M, a second developing device 42 for depositing a cyan toner C, a third developing device 43 for depositing a yellow toner Y, and a fourth developing device 44 for depositing a black toner B. Further there are disposed a photosensitive member cleaner 14 for cleaning the surface of photosensitive drum 1 after transfer of the toner image onto an intermediate image-transfer member 20.

Intermediate image-transfer member 20 is placed so as to be rotatable by contact with photosensitive drum 1, having core metal 21 in a pipe shape, and elastic layer 22 formed on the peripheral face of core metal 21. To core metal 21, bias power source 61 is connected which applies a primary transfer bias for transferring the toner image formed on photosensitive drum 1 onto intermediate image-transfer member 20. By the side of intermediate image-transfer member 20, transfer roller 25 is placed for transferring further the transferred toner image kept on intermediate image-transfer medium 20 onto recording

sheet 24, the transfer roller being held by an axis parallel with [to] the rotation axis of intermediate image-transfer member 20 to be brought into contact with the bottom face of intermediate image-transfer member 20. Transfer member cleaner 35 is disposed for cleaning the remaining toner on the surface of intermediate image-transfer member 20 after transfer of the toner image from intermediate image-transfer member 20 onto recording sheet 24. To transfer roller 25, bias power source 29 is connected to apply a secondary transfer bias for transferring the toner image from intermediate image-transfer member 20 to recording sheet 24.--

The paragraphs starting at page 25, line 16 and ending at page 26, line 1 have been amended as follows.

--The color image forming apparatus employing such an intermediate image-transfer member according to an electrophotographic method has various advantages in comparison with the conventional one, for example disclosed in Japanese Patent Application Laid-Open No. 63-301960, in which a recording sheet is fixed by sticking or adhesion onto a transfer drum and plural color images are repeatedly transferred in superposition from an image holding member, in the following points. The advantages are as explained below.

Firstly, color deviation is less. In other words, color registration is more precise [in] superposition of the color images.--

The paragraph starting at page 28, line 16 and ending at page 28, line 26 has been amended as follows.

--In Fig. 2, as shown by arrow marks, the photosensitive drums 1a to 1d are rotated clockwise, and image-transferring belt 8 is circulated counterclockwise. Photosensitive drums 1a to 1d and image-transferring belt 8 are driven at prescribed speeds, so that their relative speeds are kept constant in principle. Naturally, a slight speed variation which does not adversely affect the image formation is considered to be constant in the relative speed, similarly as in the case of the intermediate image-transfer member described above [before].--

The paragraph starting at page 31, line 2 and ending at page 31, line 5 has been amended as follows.

--A usual photosensitive member 300 for electrophotographic image forming apparatus is explained by reference to Fig. 3, which is a schematic sectional view.--

The paragraph starting at page 32, line 21 and ending at page 33, line 8 has been amended as follows.

--Deposition assembly 400 has vertical reaction vessel 401, a vacuum vessel. Protrusion 404 is provided on the side wall of reaction vessel 401 for application of high-frequency electric power. Plural gas introduction pipes 403 extending vertically are

provided inside along the side wall of reaction vessel 401. Gas introduction pipes 403 have [has] many small holes on the side walls along the length direction. Heater 402 is provided in a spiral form vertically at the center of reaction vessel 401. At the tope of reaction vessel 401, a openable cap 401a is provided for insertion of cylindrical substrate 412 as the base of photosensitive drum 1 into reaction vessel 401. [s] Substrate 412 is placed so as to enclose heater 402 inside.--

The paragraph starting at page 33, line 21 and ending at page 34, line 12 has been amended as follows.

--Firstly, substrate 412 as the base of the photosensitive drum is placed in reaction vessel 401. The reaction vessel is closed with cap 401a, and is evacuated to a prescribed pressure or lower by an evacuation assembly which is not shown in the drawing. With the evacuation continued, substrate 412 is heated from inside by heater 402 to keep substrate 412 at a prescribed temperature ranging from 20°C to 450°C. With substrate 412 kept at the prescribed temperature, a prescribed source gas or gases corresponding to the intended photosensitive layer are introduced through introduction pipe 403 into reaction vessel 401 at a flow rate controlled respectively by a flow controller (not shown in the drawing) for the respective source gas introduction systems. The introduced gas is allowed to fill reaction vessel 401 and is evacuated through evacuation pipe 407 to the outside of vessel 401 to keep the inside pressure of reaction vessel 401 at the prescribed pressure.--

The paragraph starting at page 38, line 16 and ending at page 39, line 1 has been amended as follows.

--The holder 603 is adjusted by a balance arm to contact horizontally to the photosensitive element 601 in the state where a load has not been applied [to]. The holder 603 has a top pan and by adjusting the load to be applied to this top pan, a contact pressure between the photosensitive element 601 and the intermediate transferring element 602 can be adjusted. In the holder 603, a load transducer 604 is further installed to detect a force, which is applied in a horizontal direction (in a left and right directions shown in Fig. 6) perpendicularly to rotation axis of the photosensitive element 601 and the intermediate transferring element 602.--

The paragraph starting at page 43, line 22 and ending at page 44, line 7 has been amended as follows.

--The friction evaluation apparatus of Figs. 6 and 7 are installed in a known environment-testing box or an environment-testing chamber, in which an internal environment can be controlled to a predetermined condition, an environment for installing the friction evaluation apparatus is set to a predetermined temperature and humidity, and then it was allowed [allows] to stand for 24 hours or more to make the condition of the photosensitive element and the cleaning member matched to the environment set. Then, as described above, by measuring the friction coefficient and the kinetic friction deviation coefficient, characteristics such as temperature dependency can be evaluated.--

The paragraph starting at page 45, line 26 and ending at page 46, line 14 has been amended as follows.

--For an electric characteristic of the photosensitive element, it is preferable that a variation caused by the environmental change is small. Specifically, it is preferable that a change ratio of electrifiability in change of a temperature (hereafter, temperature characteristic) falls in the range of ±2 V/°C. According to such condition, characteristics, of the photosensitive element, influencing on latent image formation and toner image formation become stable without a considerable effect of environment. And, by using the photosensitive element satisfying this condition, an image-forming apparatus capable of forming an image with a high quality stably and preferably can be constituted and a cleaning condition such as the state of toner left after transfer become stable.--

The paragraphs starting at page 48, line 9 and ending at page 49, line 27 have been amended as follows.

--As the method for measuring the state of localization level in such band gap, as a rule, deep level spectrophotometry, isothermal capacity transient spectrophotometry, photothermal polarization spectroscopy, photoacoustic spectroscopy, and constant photocurrent method are used. Among these, the constant photocurrent method (hereafter, CPM) is useful as the method for convenience measurement of the subgap light absorption spectrum on the basis of the localization level of a-Si : H. Measurement in the present experimental example was carried out by this CPM. CPM is

the method for measurement of the energy level of a sample by irradiating a light of a predetermined wavelength [wave length] changing a light quantity to make a photocurrent of a thin film sample constant.

In the present experimental example, for measuring characteristic energy Eu of the tail of the exponential function, the following photosensitive element was prepared for testing,. By employing the above-described [above described] film-forming apparatus and the method comparable to a manufacturing method of the photosensitive element to be tested, an a-Si film sample with a film thickness of about 1 μm was deposited on a glass substrate (commercial name: 7059 made by Corning Inc.) and an Si wafer, which have been mounted on a cylindrical sample holder, under a condition of preparation of photoconductive layer. An Al comb electrode for measurement of characteristic energy Eu was vaporized on a deposit film sample formed on the glass substrate to prepare the photosensitive element to be tested. A test [Test] was carried out by using spectrophotometer SS-25GD (commercial name) made by Nippon Bunkou Corporation, current supply amplifier LI-76 (commercial name) made by NF Circuit Corp., and a lock-in made by the same corporation amplifier 5610B (commercial name).

On the other hand, as the image-forming apparatus of electrophotographic system for a temperature characteristic evaluation, an image-forming apparatus was user [used] modified for electric characteristics evaluation by installing a modified electricpotential sensor for the surface of the photosensitive element housed in NP6750, made by Canon Inc. in the NP6750. Furthermore, a heater of a photosensitive element was

modified to make the temperature of the photosensitive element variable and a noncontact [non-contact] thermometer was installed for preparation.--

The paragraphs starting at page 51, line 26 and ending at page 53, line 5 have been amended as follows.

--As described above, the image forming apparatus, by which the image is practically formable on the recording material P, is used, a toner is used which is made by Canon Inc., i.e., NP6750 toner, and a member of the image-transferring belt 208 used was various similar to the experimental example 1 including the transferring blade. As the photosensitive element, the photosensitive element prepared differs in the friction characteristics of the surface through adjusting a composition of material gases and discharging electric power.

By using such various image-transferring belts and photosensitive bodies, the contact pressure between the image-transferring belt 208 and the a-Si photosensitive element 201 was changed in a range from 0 (adjusting mechanisms opened) to 1500 g/cm^2 (147kPa) and the image-forming apparatus was put in the environment-testing chamber, and the installing environment for the image-forming apparatus was put under a condition adjusted to a low temperature and low humidity environment (hereafter, "L/L environment") of 10°D and 15 percent, respectively, a normal temperature and a normal humidity environment (hereafter, "N/N environment") of 23°C and 50 percent, respectively, and a high temperature and high humidity environment (hereafter, "H/H

environment") of 33 °C and 85 percent, respectively, in order to conduct a paper-passing duration test. Where, in the L/L environment and the N/N environment, a test was conducted by turning a photosensitive element heater to OFF and in the H/H environment, a test was conducted by turning the photosensitive element heater to OFF and also by turning the photosensitive element heater to ON accompanying with various temperatures for temperature-setting.--

On page 54, replace Table 1 with the following Table 1.

Table 1

	Symbol	Determination standard
Very good	A	No fixing of toner to the surface of the photosensitive element.
Good	B	Toner fixed is 1.5 mm or less in diameter and three or fewer in number; no black line occurs.
No problem practically	C	There is toner, which has been fixed to the surface of the photosensitive element, matched the determination standard "good" or more superior; the black line caused by fixing is 1.5 mm or shorter in length and five or fewer in number.
There are some practical [practically] problems	D	According to fixing of toner to the surface of the photosensitive element, the black line occurred in a grade of and over the determination standard, "no problem practically."

The paragraph starting at page 56, line 17 and ending at page 57, line 3 has been amended as follows.

--In addition, in the case where the contact pressure between the image-transferring belt 208 and the a-Si photosensitive element 201 was changed higher from the above-described [above described] preferable range to make the friction force larger and where the temperature was set higher to work the photosensitive element heater, the temperature considerably rose occasionally. In the case where the temperature of the contact part of the cleaning member was 60°C or higher, toner fixed occasionally to the surface of the photosensitive element and the cleaning member. In an excessively high temperature, toner fixes to the photosensitive element to make latitude for such occurrence as fusion appearing on the image narrow, to be not preferable.--

The paragraph starting at page 58, line 9 and ending at page 59, line 3 has been amended as follows.

--The following examination was carried out for a surface shape of the intermediate transferring element or the image-transferring belt and the photosensitive element. The surface of the photosensitive element before use and after being subjected to the paper-passing duration test was observed by using an AFM (atomic force microscope). As the result, it was found that a filming quantity differs particularly in a recessed part corresponding to an average inclination Δa of the surface of the photosensitive element. In addition, a correlation was found between this filming quantity and occurrence of image

flow. Thus, it was known that for suppressing formation of the filming film, adjusting the surface shapes of the intermediate transferring element or the image-transferring belt and the photosensitive element brings a splendid effect. By adjusting the surface shapes of the intermediate transferring element or the image-transferring belt and the photosensitive element, particularly in the image-forming apparatus having no photosensitive element heater, formation of the filming film can be suppressed and thus, image flow can be also prevented.--

The paragraph starting at page 59, line 26 and ending at page 60, line 24 has been amended as follows.

--On the a-Si photosensitive element, it has been known that an abnormally-grown projection part, which has a diameter ranging from several micrometers to several hundred micrometers and a height ranging from several micrometers to several ten micrometers and formed around a nucleus being injury of and dust on a substrate in film formation, is formed. Such projection is a big one having a different size than typical one in evaluation of the roughness Ra of a center line and the average inclination Δa. [Caused by this projections, filming] Filming and fusion occasionally occur because of this projection. Then, by a photosensitive element surface treatment method disclosed in the specification of Japanese Patent No. 2047474 (Japanese Patent Publication No. 07-077702) a treatment for reducing the height of the abnormally-grown projection. As a [the] result, concerning filming and fusion caused by such projection, it has been known that when the

height of the projection is the same as the or less than a particle size of toner, specifically, 5 μm or less, they do merely occur. This may be because influenced by high surface hardness of the a-Si photosensitive element, a part captured by the intermediate transferring element or the image-transferring belt becomes small and occurrence of injury is suppressed and hence, small vibration and fusion caused by this small vibration are prevented.--

The paragraph starting at page 64, line 2 and ending at page 64, line 5 has been amended as follows.

--Next, on the image-forming apparatus satisfying the above-described [above described] preferred conditions resulting [led out] from the above-described [above described] experimental examples, further specific examples will be described [shown for description].--

The paragraph starting at page 68, line 3 and ending at page 68, line 6 has been amended as follows.

--Under the above-described [above described] conditions, image forming was carried out and a transfer efficiency, an image quality, and durability for repetition of copying were tested and confirmed.--

The paragraph starting at page 68, line 24 and ending at page 69, line 9 has been amended as follows.

--When the image forming test was repeatedly carried out, a voided character was not generated, a fine line could be outputted with a good quality, and for a filled image, an the image with an even quality was yielded. After a duration test by passing ten thousands sheets of paper, the good quality image similar to an initial stage was yielded and the secondary transfer efficiency was 95 percent and showed almost no deterioration. A microscopic observation of the surface of the intermediate transferring element after the duration test by passing twenty thousands sheets of paper almost merely showed occurrence of filming of toner yielding a good result.--

The paragraph starting at page 69, line 15 and ending at page 70, line 2 has been amended as follows.

--As the photosensitive element, the aluminum [aluminium] cylinder with the 62 mm diameter and the thickness of about 3mm was used as a base body and the a-Si photosensitive element having the a-C surface layer was also used. Morphology of the surface of the photosensitive element was prepared to have the average roughness Ra 0.03 μm of the center line and the average inclination Δa of 0.03. On the surface of the photosensitive element, a light emission diode to emit a light mainly composed of a 700 nm peak wavelength [wave length] was used to do pre-exposure and image exposure was carried out by using a semiconductor laser having a 680 nm peak wavelength [wave length]

to form a static latent image. As the image-transferring belt, one made from the material same as that of the Example 1 was used.--

The paragraph starting at page 70, line 20 and ending at page 70, line 25 has been amended as follows.

--Reference [The reference] numeral 1 denotes a rotative drum-type electrophotographic photosensitive element (hereafter, photosensitive drum) repeatedly used as a first image carrier and rotatively driven in the predetermined circumferential velocity (processing speed) in a clockwise direction shown by an arrow.--

The paragraphs starting at page 71, line 25 and ending at page 72, line 11 have been amended as follows.

--The intermediate image-transferring belt 20 is rotatively driven in the predetermined circumferential velocity (a [()]circumferential velocity the same as that of the photosensitive drum 1) in the clockwise direction.

Yellow toner image of the above-described [above described] first color formed and borne [born] on the photosensitive drum 1, during the process in which it passes through a nip part of the photosensitive drum 1 and the intermediate image-transferring belt 20, by an electric field formed by a primary transfer bias, which is applied from a primary transfer roller 62 to the intermediate image-transferring belt 20, is

sequentially and intermediately transferred (primarily transferred) to an outer circumferential face.--

The paragraph starting at page 72, line 24 and ending at page 73, line 1 has been amended as follows.

--The reference numeral 63 is a secondary transferring roller born in parallel with [to] an opposite roller 64 for a secondary transfer and installed on a bottom face part of the intermediate image-transferring belt 20 in a separable state.--

The paragraph starting at page 74, line 18 and ending at page 74, line 22 has been amended as follows.

--The above-described [above described] toner left after transfer is statically transferred to the photosensitive drum 1 in the nip part of and around the photosensitive drum 1 and hence, the intermediate image-transferring belt is cleaned.--

The paragraphs starting at page 75, line 5 and ending at page 76, line 3 have been amended as follows.

--In addition, on the contact face of the photosensitive drum 1 to the intermediate image-transferring belt (the [(]same in case of the above-described [above described] cylindrical intermediate transferring element and image-transferring belt,) as

described above, respective parts are rotatively driven in the same circumferential velocity, as a rule, in the same direction.

However, with a purpose to improve transfer efficiency and the like, in the range not badly influencing [on] image formation, a previously-determined [previously determined] small relative speed difference in the above-described [above described] circumferential velocity, in other words, a small difference in circumferential velocity, may be set.

Needless to say, similar to case of the cylindrical intermediate transferring element and the image-transferring belt, a very small speed variation caused by variability and shift of rotative drive can be regarded as a constant relative speed.

In the present example, as the photosensitive element, the aluminum [aluminium] cylinder with the 80 mm diameter and the thickness of about 3 mm was used as the base body and the a-Si photosensitive element, negatively charged, having amorphous silicon as an optically conductive layer and the nonmonocrystal carbon (a-C, amorphous carbon) as the surface layer was also used.--

The paragraph starting at page 76, line 10 and ending at page 76, line 17 has been amended as follows.

--Under the above-described [above described] conditions, similar to the Example 1 and the Example 2, the duration test was conducted by passing twenty thousands A4 sized sheets of paper by adjusting to meet the range of the present invention

and then, the microscopic observation of the surface of the intermediate image-transferring belt merely showed occurrence of filming of toner yielding a stabilized output of the image.--

VERSION WITH MARKINGS SHOWING CHANGES MADE TO ABSTRACT

The Abstract section starting at page 89, line 2 and ending at page 89, line 23 has been amended as follows.

--In an [An] electrophotographic image process [is provided. In this process], a latent image is formed on a photosensitive drum [1], and a toner image is formed on the latent image. The toner image is temporarily transferred onto an intermediate image-transfer member (medium) [20]. The photosensitive drum [1] and the intermediate image-transfer member (medium) are brought into contact [at an intended contact pressure,] and are rotated at an prescribed [intended] relative speed. At the contact portion, fine vibrations [vibration] of the photosensitive drum [1] and the intermediate image-transfer member (medium), [20] which can be caused by repeated contact and separation are [is] prevented by controlling the contact temperature between the photosensitive member and the intermediate image-transfer member (medium) [and the intermediate-image transfer member] to be in the range of [from] 15 to 60° C. A[, and a] kinetic frictional deviation (a standard deviation of a kinetic frictional force) is controlled to be less than the average value of the kinetic frictional force. By suppressing the fine vibration, deviation in image transfer is prevented. In addition [Further thereby], toner melt adhesion and foreign matter deposition is prevented, whereby image blurring is prevented.--

VERSION WITH MARKINGS SHOWING CHANGES MADE TO CLAIMS

1. **(Amended)** An image-forming [image forming] process for use in an electrophotographic system employing an image forming apparatus equipped with a photosensitive member including [having] a photoconductive layer composed of a silicon-based non-monocrystalline material and a surface layer composed of a non-monocrystalline material formed on a peripheral face of a substantially-cylindrical [cylindrical] electroconductive substrate, and a substantially-cylindrical [cylindrical] intermediate image transfer member in contact with a surface layer of the photosensitive member [at the surface thereof], and rotating the photosensitive member and the intermediate image-transfer member at a prescribed relative speed[; the], said image-forming process comprising:

an electrifying step of electrifying the [a] surface layer of the photosensitive member[,];

a latent image-forming step of forming an electrostatic latent image by projection of light onto the surface layer electrified in said [the] electrifying step[,];

a developing step for forming a toner image by deposition of a toner on the surface layer bearing [carrying] the electrostatic latent image formed by said [the] latent image-forming step[, and];

an image-transferring [image transferring] step for transferring the toner image formed in said [the] developing step onto the intermediate image-transfer [image transfer] member; and

repeating said [the] electrifying step, said [the] latent image-forming step, said [the] developing step, and said [the] transferring step a plurality of [plural] times to form a plurality of [plural] toner images in superposition on the intermediate image-transfer [image transfer] member[,]; and

a transferring step of transferring the toner images formed in superposition on the intermediate image-transfer member onto a recording sheet,

wherein the photosensitive member and the intermediate image-transfer member are brought into contact at a contact face and at a contact temperature in the range of [ranging from] 15°C to 60°C at the prescribed [an intended] relative speed of the photosensitive member to the intermediate image-transfer member to achieve [give] a kinetic frictional deviation (a standard deviation of a kinetic frictional force) less than an [the] average value of the kinetic frictional force.

2. **(Amended)** The image-forming [image forming] process according to claim 1, wherein a kinetic frictional deviation factor is not higher than 0.1, wherein [where] the kinetic frictional deviation factor is a rate of change of the kinetic frictional deviation per unit length in a length direction of the contact face with a [to the] contacting linear pressure, and

wherein the contacting linear pressure is defined as a [the] force applied to contact the photosensitive member with the intermediate image-transfer member per unit length in the length direction of the contact face.

3. **(Amended)** The image-forming [image forming] process according to claim 2[1], wherein a [the] range of a variation of the kinetic frictional deviation factor is not more than 0.02 for a change of the contact temperature [of the photosensitive member with the intermediate image-transfer member from] in the range of 15°C to 60°C.

4. **(Amended)** The image-forming [image forming] process according to claim 1, wherein the surface layer is composed of a non-monocrystalline material based on at least one of silicon and carbon, and

wherein a [the] range of variation of a [the] kinetic frictional deviation factor is not more than 0.01 for a change of the contact temperature [of the photosensitive member with the intermediate image-transfer member from] in the range of 15°C to 60°C.

5. **(Amended)** The image-forming [image forming] process according to claim 1, wherein a rate of change of a dark portion electrifying ability to a [temperature] change of temperature of a surface of the photosensitive member is [ranges] within ±2%/°C.

6. **(Amended)** The image-forming [image forming] process according to claim 5, wherein a [the] characteristic energy in an exponential energy distribution of a tail level of a valence band is in the range of [ranges from] 50 to 70 meV.

7. **(Amended)** The image-forming [image forming] process according to claim 1, wherein a center-line average roughness according to JIS B0601-1994 of the surface layer of the photosensitive member is in the range of [ranges from] 0.01 to 0.9 μm, and

wherein the average inclination Δa [defined by] is in the range of [Equation below ranges from] 0.001 to 0.06, as defined by the following equation:

$$\Delta a = \frac{1}{\ell} \int_0^{\ell} \left| \frac{dy}{dx} \right| dx$$

where y is a height in a Y direction at a point x of a curve extending in an X direction.

8. **(Amended)** An image-forming [image forming] process for an electrophotographic system employing an image-forming [image forming] apparatus equipped with a plurality of [plural] photosensitive members including, [having] respectively, a photoconductive layer composed of a silicon-based non-monocrystalline

material and a surface layer composed of a non-monocrystalline material formed on a peripheral face of a substantially-cylindrical [cylindrical] electroconductive substrate, and an image-transferring belt for holding and delivering a recording sheet with successive contact, respectively, with the surfaces of the plurality of [plural] photosensitive members, and moving the plurality of photosensitive members [member] and the recording sheet at a prescribed relative speed[;], the image forming process comprising:

an electrifying step of electrifying a surface layer of one of the photosensitive members[,];

a latent image-forming step of forming an electrostatic latent image by projection of light onto the surface layer electrified in said [the] electrifying step[,];

a developing step for forming a toner image by deposition of a toner on the surface layer bearing [carrying] the electrostatic latent image formed in said [by the] latent image-forming step[, and];

an image-transferring [image transferring] step for transferring the toner image formed in said [the] developing step onto the recording sheet; and

repeating said [the] electrifying step, said [the] latent image-forming step, said [the] developing step, and said image-transferring [the transferring] step for [the] each of a remaining [respective] plurality of [plural] photosensitive members to form a plurality of [plural] toner images in superposition on the recording sheet,

wherein the photosensitive member and the recording sheet are brought into contact at a contact face and at a contact temperature in the range of [ranging from] 15°C

to 60°C at the prescribed [an intended] relative speed of the photosensitive member to the recording sheet to achieve [give] a kinetic frictional deviation (a standard deviation of a kinetic frictional force) less than an [the] average value of the kinetic frictional force.

9. **(Amended)** The image-forming [image forming] process according to claim 8, wherein a kinetic frictional deviation factor is not higher than 0.1, where a [the] kinetic frictional deviation factor is a rate of a change of a [the] ratio of the kinetic frictional deviation per unit length in a length direction of the contact face with a [to the] contacting linear pressure, [and the]

wherein the contacting linear pressure is defined as a [the] force applied to contact the photosensitive member with the recording sheet per unit length in the length direction of the contact face.

10. **(Amended)** The image-forming [image forming] process according to claim 9[8], wherein a [the] range of variation of the kinetic frictional deviation factor is not more than 0.02 for a change of the contact temperature [of the photosensitive member with the recording sheet from] in the range of 15°C to 60°C.

11. **(Amended)** The image-forming [image forming] process according to claim 9[8], wherein the surface layer is composed of a non-monocrystalline material based on at least one of silicon and carbon, and

wherein a [the] range of variation of the kinetic frictional deviation factor is not more than 0.01 for a change of the contact temperature [of the photosensitive member with the intermediate image-transfer member from] in the range of 15°C to 60°C.

12. **(Amended)** The image-forming [image forming] process according to claim 8, wherein a rate of change of a dark portion electrifying ability to a [temperature] change in temperature of a surface of the photosensitive member is [ranges] within ±2%/°C.

13. **(Amended)** The image-forming [image forming] process according to claim 12, wherein a [the] characteristic energy in an exponential energy distribution of a tail level of a valence band is in the range of [ranges from] 50 to 70 meV.

14. **(Amended)** The image-forming [image forming] process according to claim 8, wherein a center-line average roughness according to JIS B0601-1994 of the surface layer of the photosensitive member in the range of [ranges from] 0.01 to 0.9 μm, and

wherein the average inclination Δa [defined by Equation below] is in the range of [ranges from] 0.001 to 0.06, as defined by the following equation:

$$\Delta a = \frac{1}{\ell} \int_0^{\ell} \left| \frac{dy}{dx} \right| dx$$

where y is a height in a Y direction at a point x of-a curve extending in a X direction.

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